ENVIRONMENTAL CHEMISTS

Date of Report: April 2, 1997 Date Received: March 19, 1997 Project: Metro Grab, PO #M56595

Date Samples Extracted: March 31, 1997 Date Extracts Analyzed: March 31, 1997

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC USING METHOD 6010

Samples Processed Using Method 3005A Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	<u>Nickel</u>	<u>Zinc</u>
M56595	0.61	0.58	0.68	0.07
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: April 2, 1997 Date Received: March 19, 1997 Project: Metro Grab, PO #M56595

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 76752 (Duplicate)

				Relative	
Çhudû Chur	Reporting	Sample	Duplicate	Percent	Acceptance
Analyte:	Units	Result	Result	Difference	Criteria
	14 27t 1				
Chromium	mg/L (ppm)	0.61	0.63	3	0-20
Copper	mg/L (ppm)	0.58	0.58	0	0-20
Nickel	mg/L (ppm)	0.68	0.68	0	0-20
Zinc	mg/L (ppm)	0.07	0.07	0 a	0-20
					To a second of the

Laboratory Code: 76752 (Matrix Spike)

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Reporting Spike Sample % Recovery Acceptance I	Percent
Analyte: Units Level Result MS MSD Criteria Di	ifference
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Chromium mg/L (ppm) 5 0.61 95 95 80-120	0
Copper mg/L (ppm) 5 0.58 93 93 80-120	0
Nickel mg/L (ppm) 10 0.68 97 97 80-120	0
Zinc mg/L (ppm) 5 0.07 96 97 80-120	1

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Red MS	covery MSD	Acceptanc Criteria	Relative e Percent Difference
Chromium	mg/L (ppm)	5	99	100	80-120	1
Copper	mg/L (ppm)	5	97	97	80-120	1
Nickel	mg/L (ppm)	10	102	104	80-120	2
Zinc	mg/L (ppm)	5	101	103	80-120	2

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

F = EDMAN & BRUYA, INC. 30.12 16th Avenue West Seattle, WA 98119-2029 206) 285-8282

SAMPLE CHAIN OF CUSTODY

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					Return Samples	
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09/19/94

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Beth M. Albertson, M.S. Bradley T. Benson Kelley D. Wilt 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

April 2, 1997

INVOICE # 97ACU0402-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Grab, PO #M56595: Results of testing requested by Gerry Thompson, Project Manager for material submitted on March 19, 1997.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due

\$ 65.00

FEDERAL TAX ID #(b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Beth M. Albertson, M.S. Bradley T. Benson Kelley D. Wilt 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

April 2, 1997

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on March 19, 1997 from your Metro Grab, PO #M56595 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson Chemist

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Enclosures ACU0402R.DOC